

Product datasheet for **RR210614**

Katnal1 (NM_001006956) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Katnal1 (NM_001006956) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Katnal1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR210614 representing NM_001006956
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGAATTTGGCCGAGATTTGTGAGAATGCGAAGAAAGCCGGGAATATGCACTTCTGGGAATTATGACT
 CGTCAATGGTGTATTACCAGGGAGTAATACAGCAGATCCAGAGACTGCCAGTCACTGAGAGACCCGGC
 CACCAAAGCGAAGTGGCAGCAGGTTTCGGCAGGAGCTCTTGGAAGAATATGAACAAGTTAAGAGTATCGTC
 AGCACGTTAGAAAAGCTTTAAGATGGACAAGCCCCCTGACTTCCCTGTGTCTTGTGCGAGACGAACCGTTTA
 GAGATCCGGCAGTATGGCCACCCCGGTCCCTGCAGAACACAGAGCACCACCTCAAATCAGGCGTCCCAA
 CCGAGAAGTGAGGCTCTGCGGAAAGACATGGGGCAGGAGCCCGGGCCTCGTGGGCCGAGCACACCAG
 ATATCGAAGAGTGATAAAGCTGCAAGTCGGGACAAGGACTATAGAGCAAGAGGGAGAGATGACAAGGCAA
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 TCTGGTGGAGGCTCTGGAGAGGGACATTGTGTCCAGGAACCTAGCATTCACTGGGATGATATAGCAGAT
 CTGGAGGAAGCTAAGAAGTTGCTCCGGGAAGCTGTTGTCCTTCCCATGTGGATGCCTGACTTTTTCAAAG
 GGATTAGAAGGCCATGGAAGGTGTGCTGATGGTCGGCCCTCCAGGGACTGGTAAGACTATGCTGGCTAA
 AGCTGTTGCCACCGAATGTGGACAACCTTTTTCAACGCTCCTCTTCCACCCTGACGTCTAAGTACCGA
 GGCGAGTCTGAGAAGTTGGTCCGTCTGTTGTTTGAATGGCGAGGTTCTATGCCCTACCACGATCTTCA
 TCGACGAAATAGACTCCATCTGCAGTCGAAGAGGGACCTCCGATGAGCATGAGGCCAGCCGAGAGTGAA
 GTCCGAGTCTCATCCAGATGGACGGAGTTGGAGGAGCCTTAGAAAACGATGATCCATCCAAAAATGGTG
 ATGGTCTGGCGGCTACGAACTTCCCGTGGGACATCGATGAGGCTCTGCCAGGAGACTGGAGAAGAGGA
 TCTACATCCCTCTCCCCACAGCAAAGGAAGGGCGGAGCTCCTGAAGATCAGCCTCCGGGAGGTGGAGCT
 GGACCCCGACATCCACCTGGAGGACATCGCTGAGAAGACGGAGGGCTACTCGGGCCTGACATAACTAAC
 ATCTGCAGAGATGCTTCTCTGATGGCCATGAGGGCGCATCAACGGCCTGAGTCCAGAAGAGATCAGGG
 CCCTGTCCAAGGAGGAGCTGCAGATGCCTGTACCAGAGGGGACTTGGAGCTGGCGCTGAAGAAAATCGC
 CAAGTCTGTCTCTGCGGCAGACCTGGAGAAGTACGAAAAGTGGATGGTTGAGTTCGGATCTGCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR210614 representing NM_001006956
 Red=Cloning site Green=Tags(s)

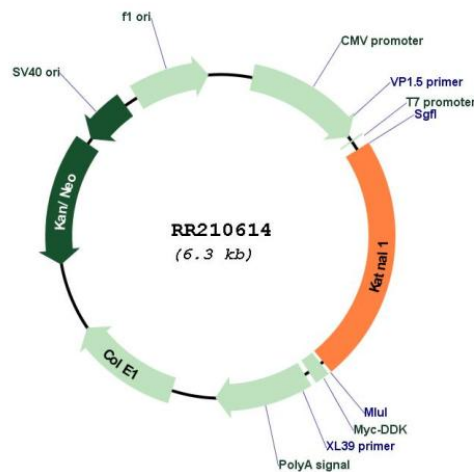
MNLAEICENAKKGREYALLGNYDSSMVYYQGVIIQQIRHCQSLRDPATKAKWQQVRQELLEEEYEQVKSIV
 STLESFKMDKPPDFVSCRDEPFRDPAVWPPVPAEHRAPPQIRRPNREVRPLRKDMGAGARGLVGRAHQ
 ISKSDKAASRDYRARGRDDKARKNMQDGASDGEIPKFDGAGYDKDLVEALERDIVSRNPSIHWDIAD
 LEEAKLLREAVVLPMMWPDFFKGIRRPWKGVLMVGPPTGKTM LAKAVATECGTTFNVSSTLTSKYR
 GESEKLVRLLFEMARFYAPTTIFIDEIDSICSRRTSDEHEASRRVKSELLIQMDGVGGALENDPDKMV
 MVLAATNFPWDIDEALRRRLEKRIYIPLTAKGRAELKISLREVELDPDIHLEDIAEKTEGYSADITN
 ICRDASLMAMRRRINGLSPEEIRALSKEELQMPVTRGDLELALKKIAKSVSAADLEKYEKWMVEFGSA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Plasmid Map:


ACCN: NM_001006956

ORF Size: 1464 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_001006956.1 , NP_001006957.1
RefSeq Size:	1663 bp
RefSeq ORF:	1467 bp
Locus ID:	288449
UniProt ID:	Q5XIK7
Cytogenetics:	12p11
MW:	55.2 kDa
Gene Summary:	Regulates microtubule dynamics in Sertoli cells, a process that is essential for spermiogenesis and male fertility. Severs microtubules in an ATP-dependent manner, promoting rapid reorganization of cellular microtubule arrays (By similarity). Has microtubule-severing activity in vitro (By similarity).[UniProtKB/Swiss-Prot Function]